

OFFICE OF PUBLIC INSTRUCTION -

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Linda McCulloch Superintendent

Grade 5 Math Performance/Achievement Descriptors

Advanced	Grade 5 Math Performance/Achievement Descriptors Students at this level demonstrate a comprehensive and in-depth understanding of the following rigorous subject
Advanced	matter.
	 Employ sophisticated or efficient problem solving strategies to solve multi-step or complex problems involving the four operations and elegantly communicate strategies using sophisticated mathematical language, symbols, and/or visual representation Employ sophisticated or efficient problem solving strategies to solve multi-step multiplication and division problems involving numbers with money Employ sophisticated or efficient problem solving strategies to solve multi-step addition and subtraction problems involving numbers with decimals and fractions Use and apply strategies and procedures to solve single-step algebraic problems Use properties and vocabulary to describe and identify two- and three-dimensional figures Locate position on a coordinate plane after a transformation Convert measures within metric and standard systems Solve geometric problems using formulas Collect, organize, display, read, and interpret complex data and use data in problem solving situations Predict the outcome of events
Proficient	Students at this level demonstrate a solid understanding of the following challenging subject matter • Employ appropriate problem-solving strategies to solve single-step problems and some multi-step problems involving the four operations and clearly communicate strategies using appropriate mathematical language,
	 symbols, and/or visual representation Employ appropriate problem-solving strategies to solve single-step multiplication and division problems involving numbers with money Employ appropriate problem-solving strategies to solve simple and some complex addition and subtraction problems involving numbers with decimals and fractions Identify and use rules for numeric and geometric patterns Use and apply strategies and procedures to solve simple algebraic problems Use properties and vocabulary to describe and identify two- and three-dimensional figures Identify transformations
	 Locate position on a coordinate plane Solve simple geometric problems using formulas Organize, display, read, and interpret data and use data in problem solving situations Find all possible outcomes of an experiment
Nearing Proficiency	 Students at this level demonstrate a partial understanding of the following subject matter Employ appropriate problem-solving strategies to single-step and/or straight computation problems of the four operations and communicate strategies using minimal mathematical language, symbols, and/or visual representation Employ appropriate problem-solving strategies to solve simple addition and subtraction problems involving numbers with decimals and fractions Use and apply some strategies and procedures to solve simple algebraic problems Use properties and vocabulary to describe and identify two- and some three-dimensional figures Organize, display, read, and interpret data and use data in simple problem solving situations

Novice

Students at this level demonstrate a minimal understanding of the following subject matter.

- Employ appropriate problem-solving strategies to single-step and/or straight computation problems for some of the four operations and communicate strategies using limited mathematical language, symbols, and/or visual representation
- Read and identify numbers into the millions
- Employ appropriate problem-solving strategies to solve single-step and/or straight computation multiplication problems involving numbers with money
- Employ some appropriate problem-solving strategies to solve simple addition and subtraction problems involving numbers with decimals
- Identify numeric and geometric patterns
- Use and apply some strategies to solve simple algebraic problems
- · Use some properties and vocabulary to describe and identify some two- and three-dimensional figures
- Identify some transformations
- Select appropriate units, tools, and techniques in applying measurement skills to everyday situations
- Display, read, and interpret data
- Find possible outcomes of a simple experiment